Amendments to the Claims

1. (original) A package packaging an item and defining a closed environment in which the item is enclosed, the packaging including an oxygen-scavenging element which includes a photo-activatable semiconductor and an electron donor, wherein the semiconductor, whilst exposed to ultra-bandgap light, generates electron-hole pairs, with the electrons acting to reduce oxygen, and thereby scavenge the same from the closed environment, and the holes combining with electrons sacrificed by the electron donor.

2. (original) The package of claim 1, wherein the electron donor comprises an organic material.

3. (original) The package of claim 2, wherein the organic material comprises a polymeric material.

4. (original) The package of claim 3, wherein the polymeric material comprises PVA, PVC, PEG, polyethylene oxide, hydroxyethyl cellulose, or a mixture thereof.

5. (original) The package of claim 2, wherein the organic material comprises an amine.

6. (original) The package of claim 5, wherein the amine comprises EDTA, triethylamine, or a mixture thereof.

7. (original) The package of claim 2, wherein the organic material comprises an alcohol.

8. (original) The package of claim 2, wherein the organic material comprises a thiol.

9. (original) The package of claim 2, wherein the organic material comprises an aldehyde.

10. (currently amended) The package of claim 1 ~~any of claims 1 to 9~~, wherein the electron donor comprises a liquid.

11. (currently amended) The package of claim 1 ~~any of claims 1 to 9~~, wherein the electron donor comprises a solid.

12. (currently amended) The package of claim 1 ~~any of claims 1 to 9~~, wherein the electron donor comprises a gas.

13. (currently amended) The package of claim 1 ~~any of claims 1 to 9~~, wherein the electron donor comprises a vapor.

14. (currently amended) The package of claim 1 ~~any of claims 1 to 13~~, wherein the semiconductor comprises an oxide semiconductor.

15. (original) The package of claim 14, wherein the semiconductor comprises TiO_2.

16. (original) The package of claim 14, wherein the semiconductor comprises ZnO.

17. (original) The package of claim 14, wherein the semiconductor comprises WO_3.

18. (original) The package of claim 14, wherein the semiconductor comprises at least two of TiO_2, ZnO and WO_3.

19. (currently amended) The package of claim 1 ~~any of claims 1 to 18~~, wherein the oxygen-scavenging element comprises a suspension containing the semiconductor.

20. (currently amended) The package of claim 1 ~~any of claims 1 to 18~~, wherein the oxygen-scavenging element comprises a paste containing the semiconductor.

21. (currently amended) The package of claim 1 ~~any of claims 1 to 18~~, wherein the oxygen-scavenging element comprises a gel containing the semiconductor.

22. (currently amended) The package of claim 1 ~~any of claims 1 to 18~~, wherein the oxygen-scavenging element comprises a solid containing the semiconductor.

23. (original) The package of claim 22, wherein the oxygen-scavenging element comprises a block containing an activatable semiconductor.

24. (original) The package of claim 22, wherein the oxygen-scavenging element comprises a layer containing an activatable semiconductor.

25. (original) The package of claim 22, wherein the oxygen-scavenging element comprises a powder containing an activatable semiconductor.

26. (currently amended) The package of claim 1 ~~any of claims 1 to 25~~, wherein the oxygen-scavenging element comprises an encapsulating layer encapsulating at least a surface of the item.

27. (currently amended) The package of claim 1 ~~any of claims 1 to 25~~, wherein the packaging comprises a film packaging defined at least in part by the oxygen-scavenging element.

28. (currently amended) The package of claim 1 ~~any of claims 1 to 25~~, wherein the packaging includes an open-topped container and the oxygen-scavenging element comprises a film which closes the container.

29. (currently amended) The package of claim 1 ~~any of claims 1 to 25~~, wherein the packaging includes a closed container and the oxygen-scavenging element is disposed within the container.

30. (currently amended) The package of claim 1 ~~any of claims 1 to 29~~, wherein the item comprises an electronic device.

31. (currently amended) The package of claim 1 ~~any of claims 1 to 29~~, wherein the item comprises an opto-electronic device.

32. (currently amended) The package of claim 30 ~~or 31~~, wherein the item comprises a molecular device.

33. (currently amended) The package of claim 30 ~~or 31~~, wherein the item comprises a polymeric device.

34. (currently amended) The package of claim 1 ~~any of claims 1 to 29~~, wherein the item comprises a foodstuff.

35. (original) Use of an oxygen-scavenging element including a photo-activatable semiconductor and an electron donor in a package, which packages an item and defines a closed environment in which the item is enclosed, to scavenge oxygen from the closed environment whilst exposed to ultra-bandgap light.